CLAIMS

1. A composition for a thick oxide superconducting film, containing a copper salt of a branched saturated aliphatic carboxylic acid having 6 or more carbon atoms and/or a copper salt of an alicyclic carboxylic acid having 6 or more carbon atoms.

2. The composition for a thick oxide superconducting film according to claim 1, containing yttrium trifluoroacetate and barium trifluoroacetate.

3. The composition for a thick oxide superconducting film according to claim 1, containing an yttrium salt of a branched saturated aliphatic carboxylic acid having 6 or more carbon atoms and/or an yttrium salt of an alicyclic carboxylic acid having 6 or more carbon atoms, and barium trifluoroacetate.

4. The composition for a thick oxide superconducting film according to any one of claims 1 to 3, wherein the copper salt of a branched saturated aliphatic carboxylic acid having 6 or more carbon atoms and/or the copper salt of an alicyclic carboxylic acid having 6 or more carbon atoms is at least one kind selected from the group consisting of copper neodecanoate, copper isononanoate, copper 2-ethylhexanoate, and copper naphthenate.

5. The composition for a thick oxide superconducting film according to any one of claims 1 to 4, containing an organic

solvent having a boiling point of 80°C or higher as a solvent.

6. The composition for a thick oxide superconducting film according to claims 5, which is characterized in that the foregoing organic solvent is 2-octanone.

7. An oxide superconductor in the form of a thick film tape, subjecting an oxide superconducting precursor, which is obtained by coating the composition for a thick oxide superconducting film according to any one of claims 1 to 6 on a substrate and then subjecting it to a heat treatment for calcination, to a heat treatment for crystallization, thereby forming a thick oxide superconductor film on the foregoing substrate.

8. The oxide superconductor in the form of a thick film tape according to claim 7, wherein in the foregoing heat treatment for calcination, a heating rate is 2°C/min or more.

9. The oxide superconductor in the form of a thick film tape according to claim 7, wherein in the foregoing heat treatment for calcination, the product of the traveling speed of the substrate and the temperature gradient is preferably 2°C/min or more.

10. The oxide superconductor in the form of a thick film tape according to any one of claims 7 to 9, wherein the foregoing heat treatment for calcination is carried out at 250°C or higher in the atmosphere having a water vapor partial pressure of not more than 2.1% by volume.

11. The oxide superconductor in the form of a thick film tape according to any one of claims 7 to 10, wherein a difference between the maximum thickness portion and the minimum thickness portion in the foregoing thick oxide superconducting film is 1 μm or less.

12. The oxide superconductor in the form of a thick film tape according to any one of claims 7 to 11, wherein the amount of change in critical current density is ± 0.5 MA/cm^2.

13. The oxide superconductor in the form of a thick film tape according to any one of claims 7 to 12, wherein the foregoing thick oxide superconducting film is comprised of $RE_{1+x}Ba_{2-x}Cu_3O_y$ (wherein RE represents at least one element selected from the group consisting of Y, Nd, Sm, Gd, Eu, Yb, Pr and Ho; x represents the number of $0 \leq x \leq 0.4$; and y represents the number of $6.5 \leq y \leq 7.0$).